

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (Currently amended) A method in a data processing system for managing a program, the method comprising:

monitoring operation of the program, wherein monitoring the operation of the program comprises reading ahead of the execution to identify behavior constructs and their identifiers, wherein a profile of behavior constructs is created during compiling source code for the program, and wherein the profile of behavior constructs is stored in association with a unique identifier;

comparing an observed operation of the program with an expected operation of the program to form a comparison, wherein the expected operation is identified during compiling of the program;

determining whether an error has occurred based on the comparison;  
responsive to an occurrence of the error, obtaining a solution for the error; and  
implementing the solution when the solution is obtained.

2. (Original) The method of claim 1, wherein the obtaining step comprises:  
automatically executing a process to analyze the error to obtain an analysis;  
sending the analysis to a remote server with a request for the solution; and  
receiving the solution in response the request.
3. (Original) The method of claim 1, wherein the solution is at least one of a replacement executable file, a dynamic link library, a patch, and a script.
4. (Original) The method of claim 1, wherein the expected operation is stored in a database.

5. (Original) The method of claim 4, wherein the database is located on the data processing system.
6. (Original) The method of claim 1, wherein the monitoring step, the comparing step, the determining step, obtaining step, and the implementing step are implemented in an agent process.
7. (Original) The method of claim 1, wherein the monitoring step is initiated in response to an event.
8. (Original) The method of claim 7, wherein the event is a periodic event.
- 9.-10. (Canceled)
11. (Currently amended) A data processing system for managing a program, the data processing system comprising:
- a bus system;
  - a communications unit connected to the bus system;
  - a memory connected to the bus system, wherein the memory includes a set of instructions; and
  - a processing unit connected to the bus system, wherein the processing unit executes the set of instructions to monitor operation of the program, wherein monitoring the operation of the program comprises reading ahead of the execution to identify behavior constructs and their identifiers, wherein a profile of behavior constructs is created during compiling source code for the program, and wherein the profile of behavior constructs is stored in association with a unique identifier; compare an observed operation of the program with an expected operation of the program to form a comparison, wherein the expected operation is identified during compiling of the program; determine whether an error has occurred based on the comparison; obtain a solution for the error in response to an occurrence of the error; and implement the solution when the solution is obtained.
12. (Canceled)

13. (Currently amended) The data processing system of claim 11 [[12]], wherein the set of instructions to obtain a solution further obtaining means comprises:  
    ~~executing means for instructions configured to automatically executing~~ execute a process to analyze the error to obtain an analysis;  
    ~~sending means for instructions configured to sending~~ send the analysis to a remote server with a request for the solution; and  
    ~~receiving means for instructions configured to receiving~~ receive the solution in response the request,[[; and]]
14. (Currently amended) The data processing system of claim 11 [[12]], wherein the solution is at least one of a replacement executable file, a dynamic link library, a patch, and a script.
15. (Currently amended) The data processing system of claim 11 [[12]], wherein the expected operation is stored in a database.
16. (Original) The data processing system of claim 15, wherein the database is located on the data processing system.
17. (Currently amended) The data processing system of claim 11 [[12]], wherein the set of instructions to monitor, compare, determine, obtain, and implement ~~monitoring means, the comparing means, the determining means, obtaining means, and the implementing means~~ are located in an agent process.
18. (Currently amended) The data processing system of claim 11 [[12]], wherein the set of instructions to monitor ~~monitoring means~~ is initiated in response to an event.
19. (Original) The data processing system of claim 18, wherein the event is a periodic event.
- 20.-21. (Canceled)

22. (Currently amended) A computer program product in a computer usable readable storage medium having computer readable program code for managing a program, the computer program product comprising:

[[first]] instructions for monitoring operation of the program, wherein monitoring the operation of the program comprises reading ahead of the execution to identify behavior constructs and their identifiers, wherein a profile of behavior constructs is created during compiling source code for the program, and wherein the profile of behavior constructs is stored in association with a unique identifier;

~~second~~ instructions for comparing an observed operation of the program with an expected operation of the program to form a comparison, wherein the expected operation is identified during compiling of the program;

[[third]] instructions for determining whether an error has occurred based on the comparison;

~~fourth~~ instructions, responsive to an occurrence of the error, for obtaining a solution for the error; and

[[fifth]] instructions for implementing the solution when the solution is obtained.

23. (Currently amended) The computer program product of claim 22, wherein the ~~fourth~~ instructions for obtaining a solution further comprises:

~~first sub~~ instructions for automatically executing a process to analyze the error to obtain an analysis;

~~second sub~~ instructions for sending the analysis to a remote server with a request for the solution; and

~~third sub~~ instructions for receiving the solution in response the request; and

24. (Original) The computer program product of claim 22, wherein the solution is at least one of a replacement executable file, a dynamic link library, a patch, and a script.

25. (Original) The computer program product of claim 22, wherein the expected operation is stored in a database.

26. (Original) The computer program product of claim 25, wherein the database is located on the data processing system.
27. (Currently amended) The computer program product of claim 22, wherein the [[first]] instructions, ~~second instructions, third instructions, fourth instructions, and fifth instructions~~ are located in an agent process.
28. (Currently amended) The computer program product of claim 22, wherein the instructions for monitoring operation of the program are ~~step~~ is initiated in response to an event.
29. (Original) The computer program product of claim 28, wherein the event is a periodic event.
- 30.-31. (Canceled)